

## **I. Project Title and Project Purpose Statement**

This project, Tune Up Jackson Triangle Homes, will ensure the meaningful involvement of Jackson Triangle residents in activities that will improve individual and community environmental, social, and economic outcomes through resource conservation and healthy homes education. The project will take place in the Jackson Triangle neighborhood (HUD Qualified Census Tract 436601) in Hayward, California 94541. Specifically, this project will address the public education aspects of Solid Waste Disposal Act, Section 8001(a); Clean Air Act, Section 103(b)(3); Toxic Substances Control Act, Section 10(a); and Federal Insecticide, Fungicide, and Rodenticide Act, Section 20(a).

The City of Hayward and ICLEI USA have been working together since 2007 around city's climate change issues. There are many opportunities to help the Jackson Triangle neighborhood improvement under climate action planning goals. In 2014, the City of Hayward adopted a new General Plan that also serves as its Climate Action Plan. The following goals and policies from the Natural Resources (NR) and the Health and Quality of Life (HQL) elements of the General Plan support the proposed program and will be included in resident education to serve as the project's community climate resiliency focus.

- Goal NR-2: Improve the health and sustainability of the community through continued local efforts to improve regional air quality, reduce greenhouse gas emissions, and reduce community exposure to health risks associated with toxic air contaminants and fine particulate matter.
- Policy NR-2.15 (Community Risk Reduction Strategy): The City shall maintain and implement the General Plan as Hayward's community risk reduction strategy to reduce health risks associated with toxic air contaminants (TACs) and fine particulate matter (PMe) in both existing and new development.
- Policy NR-2.19 (Exposure Reduction Measures for both Existing and New Receptors): The City shall work with area businesses, residents and partnering organizations to provide information about best management practices that can be implemented on a voluntary basis to reduce exposure of sensitive receptors to toxic air contaminants (TAC) and fine particulate matter (PM2.5).
- Policy HQL-5.1: The City shall support cohesive neighborhoods that sustain mental health, increase social capital, and reduce crime.
- Goal HQL-9: Build a foundation for community resilience to future threats and challenges to help ensure the City of Hayward will be able to respond and recover as quickly as possible to such threats and challenges.
- HQL-9.1 Resiliency: The City shall strive to create a strong and resilient community and region that can withstand or accommodate change and respond to challenges.
- HQL-9.2 Improve Social Support Networks: The City shall support residents and organizations efforts to mobilize assets and improve social support networks to improve local preparedness and respond to and recover from incidents.
- HQL-9.3 Collaborate on Resiliency Efforts: The City shall work with residents and businesses to identify priorities for organizing support, implementing programs, and evaluating outcomes of resilience efforts.

- HQL-9.4 Economic Resiliency: The City shall encourage a diversity of businesses and employers and expanded tax base to protect the community from economic shocks and recessions and ensure the City can continue providing adequate services.
- HQL-9.5 Hazards Resiliency: The City shall continue to assess and monitor risks from local environmental (e.g., flooding, earthquake) and man-made hazards and work with community groups and State and regional agencies to prepare residents, business, and visitors in the event of an incident.
- HQL-9.6 Energy Resiliency: The City shall continue to encourage residents and businesses to use less gasoline for transportation, and improve energy efficiency in and renewable energy generation from buildings and industry processes to reduce impacts from rising oil and energy prices.
- HQL-9.7 Climate Adaptation Planning: The City shall examine the potential long-term impacts of climate change on social, economic, and environmental well-being of the city of Hayward.
- HQL-9.8 Climate Adaptation in Plans: The City shall address climate adaptation in all disaster preparedness and emergency response plans.
- HQL-9.9 Reduce Impacts of Climate Change on Vulnerable Populations: The City shall support plans, standards, regulation, incentives, and investments to reduce the impacts of climate change on those populations most vulnerable to the impacts of climate change.

## **II. Environmental, Public Health and Community Climate Resiliency information about the Affected Community**

Climate change disproportionately affects low-income, aging, and minority communities. Like many U.S. cities, the City of Hayward, located in Bay Area, is experiencing the effects of climate change including an increased number of extreme heat days. According to the Environmental Impact Report prepared in 2013 for Hayward's General Plan, "The City of Hayward is located in the San Francisco Bay Area Air Basin, which is currently designated as a nonattainment area for a number of different types of air pollutants (including ozone precursors and various forms of particulate matter) under State and Federal ambient air quality standards." Mobile sources (e.g., cars, trucks, etc.) are the largest contributor of ozone precursor emissions, which include reactive organic gases (ROG) and nitrogen oxides (NOX). Area wide sources (e.g., paved road dust, construction and demolition activities, etc.) in Alameda County are the largest contributor of respirable particulate matter (PM10) and fine particulate matter (PM2.5) emissions. Hayward residents, specifically those along the 880 freeway, the Highway 92/Jackson Street, and Mission Boulevard corridors, have a high health risk from exposure to toxic air contaminants and fine particulate matter. The Jackson Triangle neighborhood is along the Highway 92 corridor.

Higher than average temperatures and poor air quality, exacerbated by climate change is a threat to the residents of the Jackson Triangle neighborhood, which is one of the poorest neighborhoods of Hayward and has a hospitalization rate for asthma that is 45% above the countywide rate.

The Jackson Triangle neighborhood faces an even higher vulnerability to climate change due to its low-quality housing stock and limited ability to improve housing conditions such as:

- Aging housing structure: 94.12% of overall housing stock in the neighborhood was built prior to 1980 (a threshold for stronger energy codes)<sup>1</sup> this is 23.98% higher than all of housing stock in Hayward.
- Lack of regulation for existing home improvements. The California Title 24 energy standards, enacted in 1978, requires new buildings to comply with minimum energy efficiency and more recently, with indoor air quality standards. However, there are no energy efficiency requirements for existing residential buildings. This issue is not only affecting the indoor air quality, which is correlated with asthma rates, but it imposes economic burdens due to higher energy use by residents of this neighborhood. According to HUD, energy costs consume 19% of total annual income for low-income people (compared with a national average of only 4%).
- Higher number of renters. Studies show that energy expenditures in rental multifamily housing, an important part of low-income housing supply, are approximately 37% higher per square foot than in owner occupied multifamily units. Based on 2010 Census data, 56.63% (1097 households) of the Census Tract 436601 residents are renters.
- Due to the fact that buildings owners typically cannot recoup an investment in energy efficiency improvements through rent increases, there is little incentive to make these improvements.
- Approximately 15.66 % of the Jackson Triangle population is living below federal poverty line. In addition, per capita income in Census Tract 436601 is \$17,185, which is 40% lower than Hayward's average per capita income. Therefore, even for owner occupied buildings, housing improvements may not be a priority.

ICLEI and the City took stock of the resources available to implement a green and healthy home weatherization program for low-income communities, and identified two gaps – resident engagement and City capacity / funding to supplement and scale up successful programs.

Current low-income weatherization services provided by Alameda County contractor, Spectrum, provide energy and water conservation retrofits to qualified homeowners and some renters. However, the demand for these services is greater than what the county can provide, and the work is focused on retrofits rather than resident engagement or education.

The Alameda County Healthy Homes program provides energy-related training to housing staff, but not to residents.

Through the Jackson Triangle Tune Up, residents will learn simple low or no-cost things they can do to create a more comfortable, cost effective, healthy home environment as well as the connections between these efforts and the community's broader resilience goals.

---

<sup>1</sup> Harvard study: [http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/harvard\\_jchs\\_remodeling\\_report\\_2013.pdf](http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/harvard_jchs_remodeling_report_2013.pdf) Page 9

### **III. Organization's Historical Connection to the Affected Community**

The City of Hayward has been an ICLEI USA member since 2007 when the City joined as a result of efforts initiated by the Alameda County Conference of Mayors for a countywide strategy to reduce waste and to save money. ICLEI has supported the City of Hayward with direct technical assistance and applicable tools and resources to develop its Climate Action Plan (CAP) along with subsequent municipal and community scale greenhouse gas inventories to monitor and track the CAP's progress. Through this collaboration, community awareness in disadvantaged communities was identified as an obstacle to engage these communities in the climate action planning process and develop policies and programs to address the specific needs of these communities.

Additionally, a higher level of collaboration between City departments and other agencies is required to successfully implement a program in disadvantaged communities. Hayward staff identified the Jackson Triangle neighborhood as one of its most vulnerable communities in need of a program to increase awareness around health and sustainability topics.

The program described below is the first step to building a healthy and green community in Jackson Triangle and other Hayward neighborhoods. The program will help residents understand sustainability issues at a personal level and provide them with strategies to implement changes into their daily lives.

The ICLEI project will work closely with the Hayward Promise Neighborhood (HPN) initiative toward the realization of the community's goal that all residents live in a healthy, stable community. The HPN program was initiated through a U.S. Department of Education grant with a vision that all children and youth growing up in our most distressed neighborhoods have access to great schools and strong systems of family and community support that will prepare them to attain an excellent education and successfully transition to college and a career.

### **IV. Project Description**

The overarching strategy of this project is to educate residents to provide them with the information and understanding necessary to reduce energy, water, and waste and improve indoor air quality in their residences. Moreover, residents will have a greater understanding of and influence in the City's Climate Action Plan and Resilience goals and the role they as individuals play in achieving these goals.

Hayward high school seniors and California State University East Bay students will be invited to participate as student ambassadors. Their role will be to support the resident education sessions with direction from ICLEI staff. Students will be invited to deliver portions of the training, thus learning about resource conservation, healthy buildings and the connections between public health and the built environment.

Finally, through this project, ICLEI and the City will work together to conduct a citywide low income housing energy needs assessment, which together with feedback from and capacity built through the resident engagement program will position the city to effectively scope an application to compete for California Cap and Trade auction proceeds, expected to be available through the California Air Resources Board beginning in mid 2015. Auction proceeds can be

used in a variety of ways to reduce greenhouse gas emissions for the benefit of disadvantaged communities.

#### Project Timeline:

Month	Activity	Purpose
1	Kick-off meeting with city staff, HPN	Capacity building
1	Identify residents to engage	Outreach, inclusion
1	Identify Jackson Triangle student ambassadors	Education, inclusion
1	Develop outreach materials, publish training schedule	Outreach
2	Kick-off meeting with HPN, City, students	Capacity building
3	Session one (see details of 5 sessions below)	Education, capacity building
3	Draft low-income housing Needs Assessment	Research, capacity building
4	Session two	Education, capacity building
5	Session three	Education, capacity building
6	Session four	Education, capacity building
7	Session five	Education, capacity building
8	Review results of sessions	Research, capacity building
8	Incorporate resident feedback into Needs Assessment	Research, inclusion, capacity
9	Jackson Triangle (JT) celebration	Outreach
10	Draft plan to scale up program beyond JT	Research, capacity building
10	Finalize Needs Assessment	Capacity building
11	Feedback to HPN	Capacity building
11	Document strategy to replicate in other communities	Capacity building
12	Wrap-up and publish final report	Outreach, capacity building

ICLEI will utilize existing “Resident Engagement through Education” Enterprise Green Communities toolkit for sessions one through four. Details available here:

<http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/resident-engagement>

Session one: Energy Conservation (one hour) *Enterprise Green Communities material*

- Exercise 1: Reading a Utility Bill
- Discussion: How to Reduce Energy
- Exercise 2: WATT do they take?
- Video: How To Read a Utility Bill (Trainer resource and/or in class use)

*Note connection to Clean Air Act, Section 103(b)(3)*

Session two: Water Conservation (one hour) *Enterprise Green Communities material*

- Exercise 1: Discover Your Water Habits
- Exercise 2: How Much Water Can I Save?
- Discussion: Water Saving Actions (Tenant & Property Owner)
- Video: Test for Toilet Leaks (Trainer resource and/or in class use)

Session three: Healthy Living (one hour) *Enterprise Green Communities material*

- Exercise 1: Reading Home Product Labels
- Exercise 2: Make Your Own Green Cleaner
- Exercise 3: Asthma Breathing Through Straw
- Exercise 4: Pest True or False
- Video: Breathing with Asthma Demonstration (Trainer resource)

*Note connection to Federal Insecticide, Fungicide, and Rodenticide Act, Section 20(a) and Toxic Substances Control Act, Section 10(a)*

Session 4: Waste and Recycling (one hour) *Enterprise Green Communities material*

- Exercise 1: Discover What You Can Recycle
- Discussion: Recycling Action Plan
- Video: What Can Be Recycled (Trainer resource and/or in class use)

*Note connection to Solid Waste Disposal Act, Section 8001(a)*

ICLEI will create materials for Session five to connect the activities of sessions one through four to the broader community climate action and resilience plans and goals.

Session 5: Community Climate Action Plan and Resilience (one hour) *ICLEI Developed material*

- Exercise 1: Discover your place
- Discussion: How my household impacts the community and the community impacts me. What should the City consider as it develops housing, climate and resilience programs?

Based on the community engagement during all sessions, but specifically through session five, the city will receive feedback that will aid in the development of future low-income housing and resilience efforts. ICLEI will provide the city with documentation from each session using toolkits for community engagement developed by EPA Environmental Justice and others.

Partner roles to address the local environmental, public health and community climate resiliency issues include the following:

- The Hayward Promise Neighborhood (HPN), funded by the U.S. Department of Education, the San Francisco Foundation, and others is specifically targeted toward Jackson Triangle residents and students that attend the six Hayward Unified School District schools. HPN's vision is that "all children growing up in the Hayward Promise Neighborhood will have access to effective schools and strong systems of family and community support." HPN is a potential partner who could provide ICLEI with direction in terms of how and where to engage students and ways in which to leverage HPN activities. ICLEI will explore opportunities to include HPN in replicable activities outside of the Jackson Triangle neighborhood.
- The City of Hayward's Utilities & Environmental Services Department and Housing Development Specialist are responsible for the city's Climate Action Plan (Comprehensive

Plan) and housing services, respectively. As partners, they will provide ICLEI guidance concerning the city's overall planning efforts and capacity building needs. This relationship is ongoing.

- Alameda County Healthy Homes Initiative. ICLEI will engage with the county and then to energy staff who have participated in the energy training offered to professionals through the initiative. ICLEI will meet with the county to understand the training offered and explore ways in which to effectively include energy staff in the resident program and Hayward planning and needs assessment exercises.
- Multifamily affordable housing owners and managers. ICLEI will engage this audience to make them aware of the program and coordinate session participation with related activities that may be underway at that particular housing development.

### **Expected Outputs and Outcomes**

Output	Target	Outcome
Develop Session Five materials to communicate connections between individual and community actions	Materials will be applicable to other communities in Hayward and nationwide	90% of Session Five participants agree or strongly agree that community needs are represented in comprehensive plans
Deliver five education sessions to area residents	150 resident and building owner/managers participants in at least one of the five sessions	Pre/post survey 80% increased knowledge
Train students to participate as ambassadors	Two per session	Pre/post survey 80% increased knowledge
Needs Assessment for continued improvement in energy, water, waste, and health measures in low-income housing	Include resident input gathered through education sessions. Identify the benchmark and potential improvements that are inclusive of the residents most impacted	City staff unanimously agrees that the Needs Assessment is strategically significant to securing funds for project implementation

This program will reduce barriers to achieving affordable, economically vital, and sustainable communities. Our approach is to engage neighborhood residents, buildings managers, and building owners in sustainability topics. In addition, the ICLEI team will work with City staff to build the capacity in the local government to analyze and measure the potential value of building retrofits in low-income neighborhoods.

Together, we will build upon existing networks and increase capacity in the community to successfully initiate a housing retrofit program in Jackson Triangle neighborhood with affordable or no-cost programs.

Through this project, Hayward will be well prepared to compete for funding to increase the number of residents engaged, leverage the resident actions, and provide an exceptionally targeted plan to perform retrofits. This small grant will Hayward needs to build capacity in the community and local government to document the retrofit opportunities and identify the co-benefits of retrofitting housing stock in the neighborhood.

## **Evaluation**

ICLEI evaluates its programs on an on-going basis of continuous improvement through the Plan, Do, Check, Act methodology. ICLEI staff will also engage the Stakeholder Working Group on regular basis to provide monitoring and feedback opportunity to improve the program.

## **Award Management**

The team will employ documented and well-known best project management practices during the five stages of project management: Initiating, Planning, Motivating, Monitoring, and Closing.

- Initiation: The project manager will create a Statement of Work (SOW) as the written confirmation of what the project will produce and the terms and conditions under which the work will be performed. The SOW will define the purpose, objectives, constraints, and assumptions. We will define the roles and responsibilities of the core team members and create both a communication plan and plan overview with major interim deliverables and a schedule for completion.
- Planning: The Work Breakdown Structure will be incorporated into the project plan. In planning for this long-term project, the project manager will plan in detail for the first three months and plan the remainder of the project in less detail, modifying every 90 days.
- Motivating: ICLEI will provide quarterly task status reports, to include tasks, outcomes, expenditures, issues, next steps, questions, and approvals needed. Team building will encourage and reward innovation, spread leadership across the team, and air disagreement and conflict in the open, with a focus on creative solutions.
- Monitoring: Includes tracking progress and maintaining control, compared to the baseline plan, managing delays, change management processes, and risk management.
- Closing: ICLEI will document practices to be encouraged in future projects and lessons learned. The project team will also prepare and deliver short report to EPA of the lessons learned for national replicability. ICLEI will also provide a webinar to disseminate the outcome of this project to other communities.

## **V. Organizational Capacity and Programmatic Capability**

Founded in 1993, ICLEI – Local Governments for Sustainability is a non-profit 501(c)3 member association of local governments, specialized in climate change and sustainability area. ICLEI USA is located in Oakland, approximately 15 miles from Hayward.



Through collaboration with State of California, ICLEI USA staff has developed specific knowledge of California communities and their challenge to respond to climate change issues including environmental justice challenges. The ICLEI USA team specializes in areas of climate, energy efficiency and renewable energy. The energy efficiency and renewable energy team has demonstrated skills in providing trainings and building awareness in communities through its work on the Department of Energy's Solar SunShot program, which aims to increase the deployment of solar energy across the U.S.

ICLEI USA tools and technical assistance are instrumental in supporting local action to address climate change issues. ICLEI has expertise in scaling up local actions. Through lessons learned from this project ICLEI plans to deliver similar programs in other communities to address the needs of building energy and climate retrofits in low-income and disadvantaged communities.

We have been engaged with many communities in local level such as in San Diego, CA region to develop a climate adaptation program and Santa Ana, CA to develop a climate action plan. Being engaged in local level is an opportunity for ICLEI staffs to identify scalability and challenge of a program.

The program will be staffed from the Oakland office by two of ICLEI's key staff; Daren Cheatham and Saharnaz Mirzazad.

## **VI Qualifications of the Principal Investigator or Project Manager (PI/PM)**

Angie Fyfe, ICLEI USA Director, Resource Efficiency and Renewable Energy will manage this project including responsibility for award management and compliance. Angie's project management experience includes the relocation of several U.S. corporate operations, including Costco (San Diego, CA to Redmond, WA), the conversion of state unemployment insurance payments from paper checks to a debit card solution with JP Morgan Chase Bank, and LEED certification and construction management in a state government setting.

Angie served for six years as a program manager and then associate director for the Colorado Governor's Energy Office, where she was recognized for excellence in working with local communities and invited by the U.S. Department of Energy (DOE) to serve on an advisory committee to then Secretary of Energy, Steven Chu.

Angie's federal award management and compliance experience includes the successful completion of DOE awards on behalf of the Colorado Governor's Office, including approximately \$80million in American Recovery and Reinvestment Act (ARRA) grants: Weatherization, State Energy Program, and the Energy Efficiency and Conservation Block Grant. The award management included responsibility for the coordination of multiple state and local governmental agencies, ARRA reporting, National Environmental Protection Act (NEPA) documentation, Davis Bacon wages reporting, and compliance with the National Historic Preservation Act. She currently manages an \$11million DOE SunShot Solar Outreach Partnership grant, working with local governments to reduce solar Soft Costs.

## **VII. Past Performance in Reporting on Outputs and Outcomes**

ICLEI has managed numerous federal grants since its inception. Currently, ICLEI is in the fifth year of a five-year U.S. Department of Energy SunShot grant to reduce solar soft costs. The grant includes five sub contracts and is valued at \$11 million. Other recent grants and cooperative agreements include funding from the San Diego Foundation to prepare a vulnerability assessment for the county and funding from Pacific Gas and Electric to provide energy and greenhouse gas emissions tools and training to California local governments.

### **U.S. Department of Energy SunShot Solar Outreach Partnership DE-EE0003525**

Reporting of successful project outcomes occurs quarterly through DOE's online reporting platform via form 425. Point of contact:

Josh Huneycutt | U.S. DOE SunShot Initiative | 202.287.1781 [joshua.huneycutt@ee.doe.gov](mailto:joshua.huneycutt@ee.doe.gov)

### **The San Diego Foundation**

Contact: Nicola Hedge

Email: [Nicola@sdfoundation.org](mailto:Nicola@sdfoundation.org)

ICLEI USA developed a sea level rise adaptation strategy for the City of San Diego, the Port of San Diego, and six other jurisdictions through an intensive stakeholder-driven process. The project researched the capacity of community assets to cope or adapt to sea level rise. The assessment was conducted through a combination of modeling, mapping, and intensive consultation with the project's technical advisory committee. The output was the creation of a community adaptation strategy, which identified primary vulnerabilities and strategies by sector, including building stock, storm water management, and energy facilities. ICLEI's process was recognized for excellence by the California chapter of the American Planning Association.

View work product:

[http://www.icleiusa.org/static/San\\_Diego\\_Bay\\_SLR\\_Adaptation\\_Strategy\\_Complete.pdf](http://www.icleiusa.org/static/San_Diego_Bay_SLR_Adaptation_Strategy_Complete.pdf)

### **Pacific Gas and Electric**

Contact: Jillian Rich

Email: [j6r1@pge.com](mailto:j6r1@pge.com)

ICLEI created the City Planners' Energy Action Resource Guide as a product of ongoing work through the Statewide Energy Efficiency Collaborative (SEEC). SEEC is an alliance to help cities and counties reduce greenhouse gas emissions and save energy. SEEC is a collaboration between three statewide non-profit organizations and California's four Investor Owned Utilities.

## **VIII. Quality Assurance Project Plan (QAPP) Information**

The project team does not anticipate the need for a QAAP.